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Trends in heat-related mortality in the United States, 1975-2004

Author(s): Sheridan SC, Kalkstein AJ, Kalkstein LS

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Abstract:

This study addresses the long-term trends in heat-related mortality across 29 US metropolitan areas from 1975 to 2004 to discern the spatial patterns and temporal trends in heat vulnerability. Mortality data have been standardized to account for population trends, and seasonal and interannual variability. On days when a city experienced an "oppressive" air mass, mean anomalous mortality was calculated, along with the likelihood that oppressive days led to a mortality response at least one standard deviation above the baseline value. Results show a general decline in heat-related mortality from the 1970s to 1990s, after which the decline seems to have abated. The likelihood of oppressive days leading to significant increases in mortality has shown less of a decline. The number of oppressive days has stayed the same or increased at most metropolitan areas. With US homes near saturation in terms of air-conditioning availability, an aging population is still significantly vulnerable to heat events.

Source: http://dx.doi.org/10.1007/s11069-008-9327-2

Resource Description

Exposure: M

weather or climate related pathway by which climate change affects health

Meteorological Factors, Meteorological Factors, Meteorological Factors, Temperature, Other Exposure

Temperature: Extreme Heat, Fluctuations

Other Exposure: cloud cover

Geographic Feature: M

resource focuses on specific type of geography

None or Unspecified

Geographic Location: M

resource focuses on specific location

United States

Health Impact: M

specification of health effect or disease related to climate change exposure

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Injury, Other Health Impact

Other Health Impact: heat related mortality

Population of Concern: A focus of content

Resource Type: **№**

format or standard characteristic of resource

Research Article

Timescale: M

time period studied

Time Scale Unspecified